

Date: Tuesday, 13/05/2008 11:09:45 AM
 User: Julie Lecocq

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : LONG STEP ASSEMBLY HIGH SKID LH
Job Number : 39245	
Estimate Number : 10270	
P.O. Number :	Part Number : D350591311
This Issue : 13/05/2008 S.O. No. :	Drawing Number : D3272 REVB
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : LARGE FAB ASSY	Drawing Revision : B
Previous Run : 39244	Material :
Written By :	Due Date : 15/06/2008 Qty: 5 Um: Each
Checked & Approved By : <u>JLD 08.5.13</u>	
Comment : Est Rev:A 04.03.22 New issue KJ/RF	
Est Rev:B 07-06-09 Added D3272-1 JLM	
Est Rev:C 08-04-02 ECN1163 DD verified by:EC	
Est Rev:D 08-04-08 ECN1164 DD verified by:	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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**Comment:** DOCUMENT CONTROL

Photocopy bluefile and type labels as per PPP D350-591-311 CHG002

8026663 08.5.20 JLD

2.0	D32721	Step
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**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

STEP

BATCH: 837935

837935 08.05.20 5

3.0	D30671	End Plate
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**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3067-1 End Plate 831571

831571 08.05.20 5

4.0	D32191	Plate
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**Comment:** Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D3219-1 Support 838250

838250 08.05.20 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Process Sheet

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Job Number: 39245

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod MIC6234
MIC7678

3-Grind End Plate flush

PH 08.05.20 5
PH 08.05.20 5
PH 08.05.20 5

6.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 08-05-20 (5)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

5 08/05/20 (x) 5/11

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

2B/BR 08-05-21

5/11

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

SAD 08/05/26 (5)

10.0

D3065041

Step Leg Assembly Hi



Comment: Qty.: 1.0000 Each(s)/Unit Total: 5.0000 Each(s)

Pick:

Qty Part Number Description Batch
1 D3065-041 Step Leg Assy B 35626

SAD 08/05/26 3

11.0

D30661

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:

Qty Part Number Description Batch
2 D3066-1 Spacer B 38925

SAD 08/05/26 (3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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QA: N/C Closed: _____ Date: _____

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Job Number: 39245

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

MS20600AD4W4

Rivets



Comment: Qty.: 16.0000 Each(s)/Unit Total : 80.0000 Each(s)

Pick:

Qty Part Number Description Batch

16 MS20600AD4W4 Rivet 107756

SAD

08/05/26

(5)

13.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Assemble Leg Assembly as per Dwg D3272.

Leave one rivet out until welding is complete.

SAD

08/05/26

(6)

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SAD 08/05/26 (+SLH)

15.0

D30671

End Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3067-1 End Plate 337571

08.05.28 5

16.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel Aft end for welding

2-Inspect for foreign object as per QSI 024

3-Weld Aft End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod 1106834

4-Grind End Plate flush

5-Install last rivet as per Dwg.

08.05.29 5

08.05.29 5

08.05.29 5

SAD 08/05/29 (5)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

FD 08-05-09

18.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 080605/30 (X10 LH)

19.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1
touch up alodine

FL 08/06/02 (5)

20.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

First 3
11:35
320°
12:05

Cast 2.
11:05
320°
11:35

FL 08/06/02 (5)

21.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3272 and QSI 005 4.4

M 107892 FL 08-06-02.

22.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: Inspect Powder Coat and Wing Walk

S 080606/03 (X5 4)

23.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

24.0

D22303

Lug



Comment: Qty.: 4.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 D2230-3 Mounting Lug

B 38532

FL 8/6/3 (5)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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QA: N/C Closed: _____ Date: _____

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Job Number: 39245

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

D2618

Bushing



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2618

Bushing

38533

[Signature]

26.0

D2732

Rubber Extrusion



Comment: Qty.: 1.0000 f(s)/Unit Total : 5.0000 f(s)

Rubber Cushion

4 x D2732 -030

batch: 37632

[Signature]

27.0

D32351

Mounting Lug



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D3235-1

Mounting Lug

37933

[Signature]

28.0

D3278041

Support Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

1 D3278-041

Support Assembly

38929 3P

B 37780 2P *[Signature]*

29.0

D3595200300

RUBBER CUSHION



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

RUBBER CUSHION

batch: 38498

[Signature]

30.0

AN335A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN3-35A

Bolt

106993

[Signature] 8/3 (5)

W/O:		WORK ORDER CHANGES					
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Job Number: 39245

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

31.0

AN415A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 AN4-15A

Bolt

M107321 15X

M107737

25X

32.0

AN536A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN5-36A

Bolt

M108077

33.0

AN960JD10

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD10

Washer

M108077

34.0

AN960JD416

Washer



Comment: Qty.: 16.0000 Each(s)/Unit Total : 80.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

16 AN960JD416

Washer

M107939

35.0

AN960JD516

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD516

Washer

M107534

10 8/6/3 (5)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Job Number: 39245

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

36.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L3 Nut (or -3)

M107644

37.0

MS21042L4

Nut



Comment: Qty.: 8.0000 Each(s)/Unit Total: 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 MS21042L4 Nut (or -4)

M107478

38.0

MS21042L5

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L5 Nut (or -5)

M107469

39.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

40.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D350-591-311

Location:

41.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 08-06-04

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>GP</i>	DRAWN BY <i>B</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>H</i>	DRAWING NO. D3272	REV. B SHEET 1 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE NTS
A	04.03.01	NEW ISSUE	
B	07.05.18	D3272-1 WAS D2622-120	

RELEASED07.06.04 *H*

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3272-041	STEP ASSEMBLY, HIGH LONG (LH)
	X	D3272-042	STEP ASSEMBLY, HIGH LONG (RH)
1	1	D3065-041	LEG ASSEMBLY
2	2	D3066-1	SPACER
2	2	D3067-1	END PLATE
2	2	D3219-1	SUPPORT
1	1	D3272-1	STEP
16	16	MS20600AD4W4	RIVET

GENERAL NOTES:

- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *39245*

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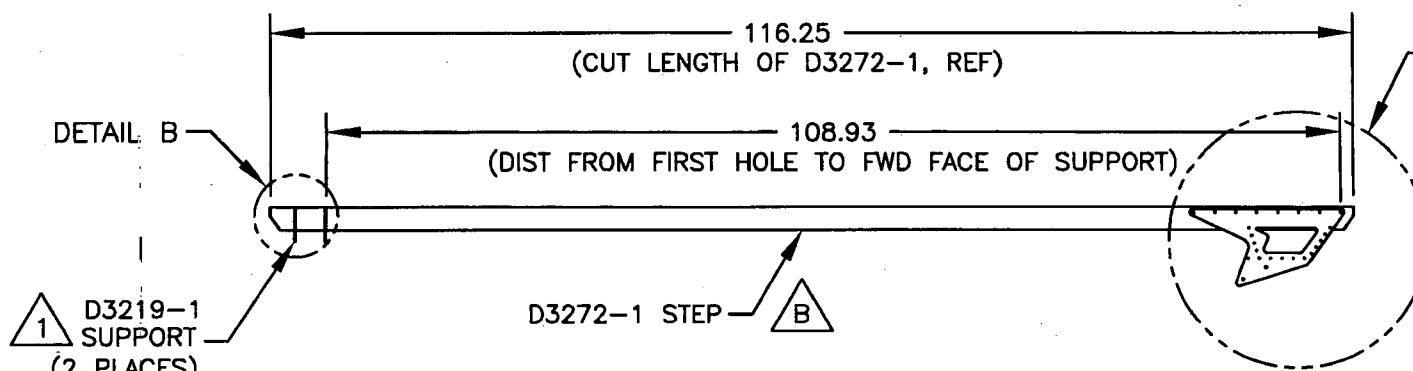
DART

DESIGN	APPROVED	DRAWING NO.	REV. B
CHECKED	APPROVED	D3272	SHEET 2 OF 3
DATE		TITLE	SCALE
07.05.18		STEP ASSEMBLY, HI LONG	1:20

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DETAIL A

DoI



D3272-041 STEP ASSEMBLY (LH. SHOWN)
D3272-042 STEP ASSEMBLY (RH, OPPOSITE)

APPLY BLACK ANTI-SKID
ON TOP SURFACE TO
BOTTOM OF TOP RADIUS

RIVET D3065-041
TO D3272-1 USING
MS20600AD4W4 RIVET
(16 PLACES)

1.36
(REF)

0.65
(REF)

GRIND FLUSH
(TYP)

(TYP)

3.375

D3219-1
SUPPORT
(REF)

D3067-1 END PLATE
(2 PLACES)

D3066-1 SPACER
(2 PLACES)

D3065-041
LEG ASSEMBLY

DETAIL A
(SCALE 1:5)

DETAIL B
(SCALE 1:5)

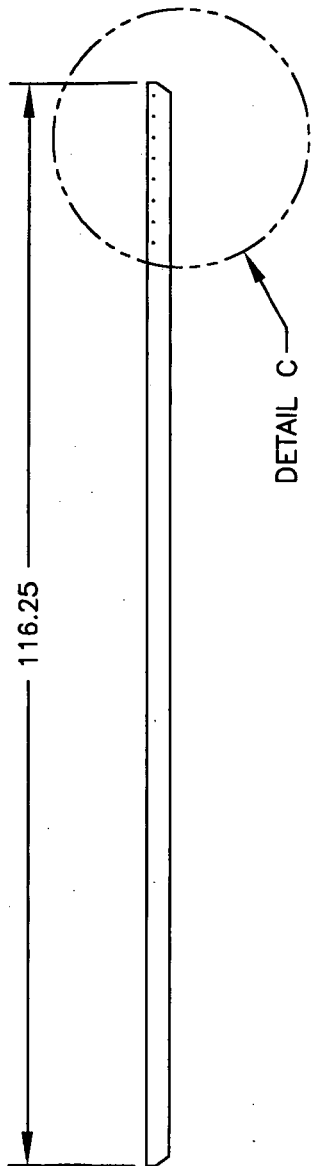
RELEASED
07.06.04



DESIGN <i>qp</i>	DRAWN BY <i>B</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3272	REV. B SHEET 3 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE 1:20

RELEASED

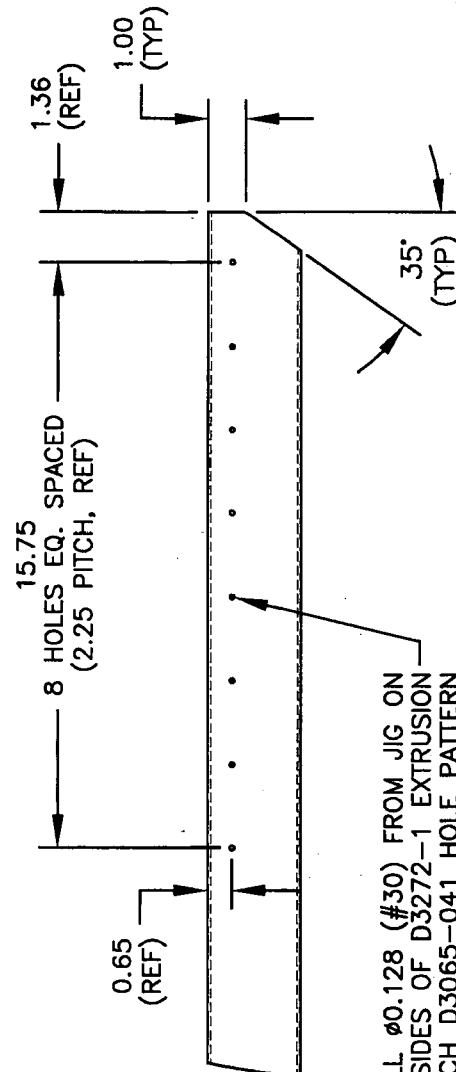
07.06.04 *[Signature]*



DETAIL C

B D3272-1 STEP

(MAKE FROM D2622-120 STEP EXTRUSION)



DETAIL C
(SCALE 1:5)

DRILL $\phi 0.128$ (#30) FROM JIG ON
BOTH SIDES OF D3272-1 EXTRUSION
TO MATCH D3065-041 HOLE PATTERN

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 39245

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